

REMARKS

The Final Office Action of May 31, 2006, has been considered by the Applicants. Applicants acknowledge the allowance of claim 25 and the indication of allowable subject matter in claims 7, 8, and 24. Claims 7, 20, and 22 have been amended. Claim 21 has been cancelled. New claim 26 has been added. Claims 1, 2, 4-8, 10-20, and 22-26 remain pending. Reconsideration of the Application is requested.

Claims 1, 2, 3-6, and 10-23 were rejected under 35 U.S.C. 103(a) as being obvious over US 2003/0144466 to Ong.

Claims 1, 2, 3-6, and 10-23 were rejected under 35 U.S.C. 103(a) as being obvious over EP 1327647 to Xerox. Applicants traverse these rejections on the same basis.

In the prior response, Applicants argued the claimed polymers were not obvious. The Examiner maintained her rejection on the grounds that any differences would be expected homolog differences.

Applicants have put claim 7 into independent form so that it and its dependent claims 8 and 24 are in allowable form. Applicants have also amended claims 20 and 22 so that they claim only polymers wherein the arylene is a dialkoxyphenylene, as recited in claim 7. Applicants have cancelled claim 21 because it recited exactly the same subject matter as claim 20. Applicants submit that due to this amendment, claims 20 and 22 now recite allowable subject matter. Although they depend from claim 16 instead of claim 7, Applicants believe that the differences are inconsequential and appreciate a statement as to whether claims 20 and 22 are now allowable.

Applicants have placed the matter cancelled from claims 20 and 22 into new claim 26. While amendments are not a matter of right after a final office action, Applicants submit that this new claim places the application in better form for appeal or further prosecution and request that the amendment be entered.

Applicants wish to note claim 12, wherein R' is halogen. Neither Ong '466 nor EP 1327647 appear to discuss polymers with a halogen-substituted thienylene segment and Applicants therefore submit that this claim also recites allowable subject matter.

In the prior Office Action of December 21, 2005, the Examiner stated that Ong '466 required disubstituted thiophenes, whereas the instant claims limit the units to monosubstituted thiophenes. The Examiner stated that disubstituted thiophenes are close homologs of monosubstituted thiophenes and would therefore render the instant claims obvious. Applicants took the position that they are not homologs. In the Final Office Action, the Examiner defined homologs as a "series of organic compounds in which each successive member of a homologous series varies by a $-CH_2-$ from the preceding member." Under this definition, though, a 2-methylthiophene segment and a 2,3-dimethylthiophene segment are not homologs because they differ by a $-CH_3$. Applicants submit that the homolog rule described in MPEP § 2144.09 deals with the obviousness of longer chains, e.g. methyl vs. ethyl, not with the number of substituents, e.g. methyl vs. dimethyl. This is why Applicants believe the structural differences render the claimed polymers non-obvious. In addition, the claimed thiophene segments are not position isomers, nor do they have the same empirical formula as the prior art thiophene segments. Therefore, they are not suggestive of each other either.

For these reasons, the claimed polymers are not obvious over the prior art. Applicants request withdrawal of the 103(a) rejections.

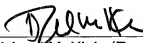
CONCLUSION

For the above reasons, it is submitted that all pending claims are in condition for allowance. Withdrawal of the rejections and issuance of a Notice of Allowance is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, she is hereby authorized to call Richard M. Klein, at telephone number 216-861-5582, Cleveland, OH.

Respectfully submitted,

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